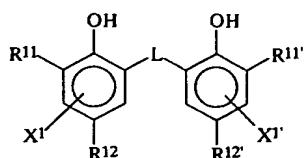


What is claimed is:

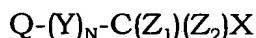
1. A photothermographic material containing, on a substrate, at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder in which the total silver iodide content of the photosensitive silver halide is 40 mol% or more and 100 mol% or less, and the coating amount of the photosensitive silver halide in terms of an amount of silver is 0.0005 g/m<sup>2</sup> or more and 0.4 g/m<sup>2</sup> or less.
2. A photothermographic material according to claim 1, wherein the photosensitive silver halide is formed in a state where the non-photosensitive organic silver salt is not present.
3. A photothermographic material according to claim 1, wherein the total silver iodide content is 90 mol% or more and 100 mol% of less.
4. A photothermographic material according to claim 1, wherein the coating amount of the photosensitive silver halide, as an amount of silver, is 0.005 g/m<sup>2</sup> or more and 0.1 g/m<sup>2</sup> or less.
5. A photothermographic material according to claim 1, wherein the coating amount of the photosensitive silver halide, as an amount of silver, is 0.005 g/m<sup>2</sup> or more and 0.05 g/m<sup>2</sup> or less.
6. A photothermographic material according to claim 1, wherein the average particle size of the photosensitive silver halide is 5 nm or more and 50 nm or less.
7. A photothermographic material according to claim 1, wherein the reducing agent contains a compound represented by the general formula (R):

General formula (R)



in which  $R^{11}$  and  $R^{11'}$  each represents independently an alkyl group of 1 to 20 carbon atoms,  $R^{12}$  and  $R^{12'}$  each represents independently an alkyl group of 1 to 20 carbon atoms,  $L$  represents an -S- group or -CHR<sup>13</sup>- group,  $R^{13}$  represents a hydrogen atom or an alkyl group of 1 to 20 carbon atoms, and  $X^1$  and  $X^{1'}$  each represents independently a hydrogen atom or a group capable of substitution on a benzene ring.

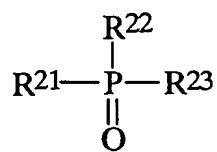
8. A photothermographic material according to claim 7, wherein  $R^{11}$  and  $R^{11'}$  in the general formula (R) each represents independently a secondary or tertiary alkyl group of 3 to 15 carbon atoms.
9. A photothermographic material according to claim 1, which further comprising a compound represented by the following general formula (H):  
General formula (H)



in which  $Q$  represents an alkyl group, aryl group or heterocyclic group,  $Y$  represents a bivalent connection group,  $N$  represents 0 or 1,  $Z_1$  and  $Z_2$  each represents a halogen atom, and  $X$  represents a hydrogen atom or an electron attractive group.

10. An image forming method for a photothermographic material which comprises exposing a photothermographic material according to claims 1 by using a semiconductor laser having an emission peak intensity at a wavelength of from 350 nm to 450 nm as a light source.

11. A photothermographic material according to claim 1, wherein the average particle size of the photosensitive silver halide is 5 nm or more and 40 nm or less.
12. A photothermographic material according to claim 1, wherein the average  $\gamma$ -phase ratio of the photosensitive silver halide is 5 mol% or more and 90 mol% or less.
13. A photothermographic material according to claim 1, wherein the average  $\gamma$ -phase ratio of the photosensitive silver halide is 25 mol% or more and 50 mol% or less.
14. A photothermographic material according to claim 1, further comprising a compound in which a one-electron oxidant formed by one-electron oxidation can release one electron or more electrons.
15. A photothermographic material according to claim 1, wherein the non-photosensitive organic silver salt contains silver behenate by 40 mol% or more and 99 mol% or less.
16. A photothermographic material according to claim 1, wherein the non-photosensitive organic silver salt contains silver behenate by 65 mol% or more and 85 mol% or less.
17. A photothermographic material according to claim 1, further comprising a development accelerator.
18. A photothermographic material according to claim 1, further comprising a compound represented by the following general formula (D):  
General formula (D)



in which  $\text{R}^{21}$  to  $\text{R}^{23}$  each represents independently an alkyl group, aryl group, alkoxy group, aryloxy group, amino group or heterocyclic group.

19. An image forming method for a photothermographic material according to claim 10, wherein the exposure illuminance of the semiconductor laser is  $1 \text{ mW/mm}^2$  or more.

20 An image forming method for the photothermographic material according to claim 10, wherein the exposure illuminance of the semiconductor laser is  $10 \text{ mW/mm}^2$  or more and  $50 \text{ mW/mm}^2$  or less.